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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/671,050

DATE: 06/21/2001  
 TIME: 17:53:52

Input Set : A:\lex46 SEQLIST.TXT  
 Output Set: N:\CRF3\06212001\I671050.raw

ENTERED

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4 <110> APPLICANT: Donoho, Gregory
5     Turner, C. Alexander Jr.
6     Nehls, Michael
7     Friedrich, Glenn
8     Zambrowicz, Brian
9     Sands, Arthur T.
11 <120> TITLE OF INVENTION: Novel Human Kinase Proteins and
12     Polynucleotides Encoding the Same
14 <130> FILE REFERENCE: LEX-0046-USA
C--> 16 <140> CURRENT APPLICATION NUMBER: US/09/671,050
C--> 16 <141> CURRENT FILING DATE: 2001-06-11
16 <150> PRIOR APPLICATION NUMBER: US 60/156,511
17 <151> PRIOR FILING DATE: 1999-09-28
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31 gatcctgttg ttaagaaaat agcactaaga gaaatacgta tgttgaagca attaaaacat      180
32 ccaaatcttg tgaacctcat cgagggtgttc aggagaaaaa ggaaaatgca tttagttttt      240
33 gaatactgtg atcatacact tttaaatgag ctggaaagaa acccaaatgg agttgctgat      300
34 ggagtgatca aaagcgtatt atggcaaaaca cttcaagctc ttaatttctg tcatatacat      360
35 aactgtattc acagagatat aaaacctgaa aatattctaa taactaagca aggaataatc      420
36 aagattgtg acttcgggtt tgcacaaatt ctgagttgga cttcatcttt ctctggtgcc      480
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48 Val Val Phe Lys Cys Arg Asn Lys Thr Ser Gly Gln Val Val Ala Val
49          20          25          30
50 Lys Lys Phe Val Glu Ser Glu Asp Pro Val Val Lys Lys Ile Ala
51          35          40          45
52 Leu Arg Glu Ile Arg Met Leu Lys Gln Leu Lys His Pro Asn Leu Val
53          50          55          60
54 Asn Leu Ile Glu Val Phe Arg Arg Lys Arg Lys Met His Leu Val Phe
55 65          70          75          80
56 Glu Tyr Cys Asp His Thr Leu Leu Asn Glu Leu Glu Arg Asn Pro Asn
57          85          90          95

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58 Gly Val Ala Asp Gly Val Ile Lys Ser Val Leu Trp Gln Thr Leu Gln
59          100          105          110
60 Ala Leu Asn Phe Cys His Ile His Asn Cys Ile His Arg Asp Ile Lys
61          115          120          125
62 Pro Glu Asn Ile Leu Ile Thr Lys Gln Gly Ile Ile Lys Ile Cys Asp
63          130          135          140
64 Phe Gly Phe Ala Gln Ile Leu Ser Trp Thr Ser Ser Phe Ser Gly Ala
65 145          150          155          160
66 Ser Leu Ile Gly Leu Ile Val Asp Leu Leu Asn Ser Phe Ser Ala Asn
67          165          170          175
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79 gatcctgttg ttaagaaaat agcactaaga gaaatacgta tgttgaagca attaaaacat      180
80 ccaaactcttg tgaacctcat cgagggtgttc aggagaaaaa ggaaaatgca tttagttttt      240
81 gaatactgtg atcatatact tttaaatgag ctggaaagaa acccaaatgg agttgctgat      300
82 ggagtgatca aaagcgtatt atggcaaaca cttcaagctc ttaattttctg tcatatacat      360
83 aactgtattc acagagatat aaaacctgaa aatattctaa taactaagca aggaataatc      420
84 aagattttgtg acttcggggt tgcacaaatt ctgattccag gagatgccta caccgattat      480
85 gtagctacga gatggtaccg agctcctgaa cttcttggtg gagatactca gtatggttct      540
86 tcagtcgata tatgggctat tggttgtggt tttgcagagc tcctgacagg ccagccactg      600
87 tggectggaa aatcagatgt ggaccaactt tatctgataa tcagaacact agtagagacg      660
88 gggtttcgcc atgttgacca ggctgggtctc gaactcttga cgtcaagtga tccacctgcc      720
89 gtagcctctc aaagtgtctg aattacagga aaattaatcc caagacatca atcaatcttt      780
90 aaaagtaacg ggtttttcca tggcatcagt atacctgagc cagaagacat ggaaactctt      840
91 gaggaaaagt tctcagatgt tcacctctgt gctctgaact tcatgaaggg gtgtctgaag      900
92 atgaatccag atgacagatt aacctgttcc caactcctgg agagctccta ctttgattct      960
93 tttcaagagg cccaaattaa aagaaaagca cgtaatgaag gaagaaacag aagacgccaa      1020
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104 Val Val Phe Lys Cys Arg Asn Lys Thr Ser Gly Gln Val Val Ala Val
105          20          25          30
106 Lys Lys Phe Val Glu Ser Glu Asp Asp Pro Val Val Lys Lys Ile Ala
107          35          40          45
108 Leu Arg Glu Ile Arg Met Leu Lys Gln Leu Lys His Pro Asn Leu Val
109          50          55          60
110 Asn Leu Ile Glu Val Phe Arg Arg Lys Arg Lys Met His Leu Val Phe

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|-----|------------------------------|------------|------------|-------------|------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 111 | 65                           |            |            |             |            | 70         |     |     |     |     |     | 75  |     |     |     |     | 80  |
| 112 | Glu                          | Tyr        | Cys        | Asp         | His        | Thr        | Leu | Leu | Asn | Glu | Leu | Glu | Arg | Asn | Pro | Asn |     |
| 113 |                              |            |            |             | 85         |            |     |     |     | 90  |     |     |     |     | 95  |     |     |
| 114 | Gly                          | Val        | Ala        | Asp         | Gly        | Val        | Ile | Lys | Ser | Val | Leu | Trp | Gln | Thr | Leu | Gln |     |
| 115 |                              |            |            | 100         |            |            |     |     | 105 |     |     |     |     | 110 |     |     |     |
| 116 | Ala                          | Leu        | Asn        | Phe         | Cys        | His        | Ile | His | Asn | Cys | Ile | His | Arg | Asp | Ile | Lys |     |
| 117 |                              |            | 115        |             |            |            |     | 120 |     |     |     |     | 125 |     |     |     |     |
| 118 | Pro                          | Glu        | Asn        | Ile         | Leu        | Ile        | Thr | Lys | Gln | Gly | Ile | Ile | Lys | Ile | Cys | Asp |     |
| 119 |                              | 130        |            |             |            |            | 135 |     |     |     |     | 140 |     |     |     |     |     |
| 120 | Phe                          | Gly        | Phe        | Ala         | Gln        | Ile        | Leu | Ile | Pro | Gly | Asp | Ala | Tyr | Thr | Asp | Tyr |     |
| 121 | 145                          |            |            |             | 150        |            |     |     |     | 155 |     |     |     |     | 160 |     |     |
| 122 | Val                          | Ala        | Thr        | Arg         | Trp        | Tyr        | Arg | Ala | Pro | Glu | Leu | Leu | Val | Gly | Asp | Thr |     |
| 123 |                              |            |            | 165         |            |            |     |     | 170 |     |     |     |     | 175 |     |     |     |
| 124 | Gln                          | Tyr        | Gly        | Ser         | Ser        | Val        | Asp | Ile | Trp | Ala | Ile | Gly | Cys | Val | Phe | Ala |     |
| 125 |                              |            |            | 180         |            |            |     |     | 185 |     |     |     |     | 190 |     |     |     |
| 126 | Glu                          | Leu        | Leu        | Thr         | Gly        | Gln        | Pro | Leu | Trp | Pro | Gly | Lys | Ser | Asp | Val | Asp |     |
| 127 |                              |            | 195        |             |            |            | 200 |     |     |     |     |     | 205 |     |     |     |     |
| 128 | Gln                          | Leu        | Tyr        | Leu         | Ile        | Ile        | Arg | Thr | Leu | Val | Glu | Thr | Gly | Phe | Arg | His |     |
| 129 |                              | 210        |            |             |            | 215        |     |     |     |     | 220 |     |     |     |     |     |     |
| 130 | Val                          | Asp        | Gln        | Ala         | Gly        | Leu        | Glu | Leu | Leu | Thr | Ser | Ser | Asp | Pro | Pro | Ala |     |
| 131 | 225                          |            |            |             | 230        |            |     |     |     | 235 |     |     |     |     | 240 |     |     |
| 132 | Val                          | Ala        | Ser        | Gln         | Ser        | Ala        | Gly | Ile | Thr | Gly | Lys | Leu | Ile | Pro | Arg | His |     |
| 133 |                              |            |            | 245         |            |            |     |     | 250 |     |     |     |     | 255 |     |     |     |
| 134 | Gln                          | Ser        | Ile        | Phe         | Lys        | Ser        | Asn | Gly | Phe | Phe | His | Gly | Ile | Ser | Ile | Pro |     |
| 135 |                              |            | 260        |             |            |            | 265 |     |     |     |     |     | 270 |     |     |     |     |
| 136 | Glu                          | Pro        | Glu        | Asp         | Met        | Glu        | Thr | Leu | Glu | Glu | Lys | Phe | Ser | Asp | Val | His |     |
| 137 |                              | 275        |            |             |            |            | 280 |     |     |     |     |     | 285 |     |     |     |     |
| 138 | Pro                          | Val        | Ala        | Leu         | Asn        | Phe        | Met | Lys | Gly | Cys | Leu | Lys | Met | Asn | Pro | Asp |     |
| 139 |                              | 290        |            |             |            | 295        |     |     |     |     | 300 |     |     |     |     |     |     |
| 140 | Asp                          | Arg        | Leu        | Thr         | Cys        | Ser        | Gln | Leu | Leu | Glu | Ser | Ser | Tyr | Phe | Asp | Ser |     |
| 141 | 305                          |            |            |             | 310        |            |     |     |     | 315 |     |     |     |     | 320 |     |     |
| 142 | Phe                          | Gln        | Glu        | Ala         | Gln        | Ile        | Lys | Arg | Lys | Ala | Arg | Asn | Glu | Gly | Arg | Asn |     |
| 143 |                              |            |            | 325         |            |            |     |     | 330 |     |     |     |     | 335 |     |     |     |
| 144 | Arg                          | Arg        | Arg        | Gln         | Gln        | Val        | Arg | Gly | Cys | Val | Trp | Leu | Leu | Gln | Leu | Cys |     |
| 145 |                              |            | 340        |             |            |            | 345 |     |     |     |     |     | 350 |     |     |     |     |
| 146 | Ser                          | Arg        | Leu        | His         |            |            |     |     |     |     |     |     |     |     |     |     |     |
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| 152 | <213> ORGANISM: homo sapiens |            |            |             |            |            |     |     |     |     |     |     |     |     |     |     | 240 |
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| 156 | tgcaagaa                     | aaacctctgg | acaagtagta | gctgttaaaa  | aatttggtga | atctgaagat |     |     |     |     |     |     |     |     |     |     | 420 |
| 157 | gacccgtg                     | ttagaaaaat | agcactaaga | gaaatacgta  | tggtgaagca | attaaaacat |     |     |     |     |     |     |     |     |     |     |     |
| 158 | ccaaatct                     | tgaacctcat | cgagggtgtt | aggagaaaaa  | ggaaaatgca | tttagttttt |     |     |     |     |     |     |     |     |     |     |     |
| 159 | gaatactg                     | atcatacact | tttaaataag | ctggaaagaa  | acccaaatgg | agttgctgat |     |     |     |     |     |     |     |     |     |     |     |
| 160 | ggagtgat                     | aaagcgtatt | atggcaaaca | cttcaagctc  | ttaatttctg | tcatatacat |     |     |     |     |     |     |     |     |     |     |     |
| 161 | aactgtatt                    | acagagatat | aaaacctgaa | aattattctaa | taactaagca | aggaataatc |     |     |     |     |     |     |     |     |     |     |     |

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163 gtagctacga gatggtaccg agctcctgaa cttcttgtgg gagatactca gtatggttct 540
164 tcagtcgata tatgggctat tgggttgtgtt tttgcagagc tcctgacagg ccagccactg 600
165 tggcctggaa aatcagatgt ggaccaactt tatctgataa tcagaacact aggaaaatta 660
166 atcccaagac atcaatcaat ctttaaaagt aacgggtttt tccatggcat cagtatacct 720
167 gagccagaag acatggaaac tcttgaggaa aagtctctag atgttcatcc tgtggctctg 780
168 aacttcatga aggggtgtct gaagatgaat ccagatgaca gattaacctg ttcccaactc 840
169 ctggagagct cctactttga ttcttttcaa gaggcccaa ttaaaagaaa agcacgtaat 900
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184 35 40 45
185 Leu Arg Glu Ile Arg Met Leu Lys Gln Leu Lys His Pro Asn Leu Val
186 50 55 60
187 Asn Leu Ile Glu Val Phe Arg Arg Lys Arg Lys Met His Leu Val Phe
188 65 70 75 80
189 Glu Tyr Cys Asp His Thr Leu Leu Asn Glu Leu Glu Arg Asn Pro Asn
190 85 90 95
191 Gly Val Ala Asp Gly Val Ile Lys Ser Val Leu Trp Gln Thr Leu Gln
192 100 105 110
193 Ala Leu Asn Phe Cys His Ile His Asn Cys Ile His Arg Asp Ile Lys
194 115 120 125
195 Pro Glu Asn Ile Leu Ile Thr Lys Gln Gly Ile Ile Lys Ile Cys Asp
196 130 135 140
197 Phe Gly Phe Ala Gln Ile Leu Ile Pro Gly Asp Ala Tyr Thr Asp Tyr
198 145 150 155 160
199 Val Ala Thr Arg Trp Tyr Arg Ala Pro Glu Leu Leu Val Gly Asp Thr
200 165 170 175
201 Gln Tyr Gly Ser Ser Val Asp Ile Trp Ala Ile Gly Cys Val Phe Ala
202 180 185 190
203 Glu Leu Leu Thr Gly Gln Pro Leu Trp Pro Gly Lys Ser Asp Val Asp
204 195 200 205
205 Gln Leu Tyr Leu Ile Ile Arg Thr Leu Gly Lys Leu Ile Pro Arg His
206 210 215 220
207 Gln Ser Ile Phe Lys Ser Asn Gly Phe Phe His Gly Ile Ser Ile Pro
208 225 230 235 240
209 Glu Pro Glu Asp Met Glu Thr Leu Glu Glu Lys Phe Ser Asp Val His
210 245 250 255
211 Pro Val Ala Leu Asn Phe Met Lys Gly Cys Leu Lys Met Asn Pro Asp
212 260 265 270

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213 Asp Arg Leu Thr Cys Ser Gln Leu Leu Glu Ser Ser Tyr Phe Asp Ser
214      275      280      285
215 Phe Gln Glu Ala Gln Ile Lys Arg Lys Ala Arg Asn Glu Gly Arg Asn
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230 gatcctgttg ttaagaaaat agcactaaga gaaatacgta tgttgaagca attaaaacat      180
231 ccaaattcttg tgaacctcat cgagggtgttc aggagaaaaa ggaaaatgca tttagttttt      240
232 gaatactgtg atcatacact tttaaattgag ctggaaagaa acccaaattg agttgctgat      300
233 ggagtgatca aaagcgtatt atggcaaaca cttcaagctc ttaatttctg tcatatacat      360
234 aactgtattc acagagatat aaaacctgaa aatattctaa taactaagca aggaataatc      420
235 aagatttgtg acttcggggt tgcacaaatt ctgagttgga cttcatcttt ctctgggtgcc      480
236 tccttgattg gcttaatagt tgaccttctg aattcttttt ctgccaatc agagattttt      540
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248      20      25      30
249 Lys Lys Phe Val Glu Ser Glu Asp Asp Pro Val Val Lys Lys Ile Ala
250      35      40      45
251 Leu Arg Glu Ile Arg Met Leu Lys Gln Leu Lys His Pro Asn Leu Val
252      50      55      60
253 Asn Leu Ile Glu Val Phe Arg Arg Lys Arg Lys Met His Leu Val Phe
254 65      70      75      80
255 Glu Tyr Cys Asp His Thr Leu Leu Asn Glu Leu Glu Arg Asn Pro Asn
256      85      90      95
257 Gly Val Ala Asp Gly Val Ile Lys Ser Val Leu Trp Gln Thr Leu Gln
258      100      105      110
259 Ala Leu Asn Phe Cys His Ile His Asn Cys Ile His Arg Asp Ile Lys
260      115      120      125
261 Pro Glu Asn Ile Leu Ile Thr Lys Gln Gly Ile Ile Lys Ile Cys Asp
262      130      135      140
263 Phe Gly Phe Ala Gln Ile Leu Ser Trp Thr Ser Ser Phe Ser Gly Ala
264 145      150      155      160
265 Ser Leu Ile Gly Leu Ile Val Asp Leu Leu Asn Ser Phe Ser Ala Asn
266      165      170      175

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L:16 M:270 C: Current Application Number differs, Replaced Current Application No  
L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date